Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

**Limiting Reactant HW #2**

1. You synthesize 50.0 g of sodium with 60.0 g chlorine gas to produce table salt. Identify your limiting reactant and your excess reactant.

2 Na + Cl2 🡪 2 NaCl

1. What is your limiting reactant in a reaction between 50.0 g of zinc and 30.0 g of hydrochloric acid? How many grams of zinc chloride are produced?

2 Zn + 2 HCl 🡪 2 ZnCl + H2

1. 40.0 g of sodium iodide are combined with 50.0 g of silver nitrate. What is the limiting reactant? How many grams of sodium nitrate are produced?

NaI + AgNO3 🡪 NaNO3 + AgI

1. 6 grams of H2 react with 16g of O2. What is the limiting reactant?

2 H2 + O2 🡪 2 H2O

1. 4 grams of H2 + 20 grams of Br2 are combined. What is the limiting reactant?

H2 + Br2 🡪 2 HBr

1. If 3.5 grams of Li combine with 18 grams of water, how many grams of LiOH will be produced? You must first determine the limiting reactant.

2 Li + 2 H2O 🡪 2 LiOH + H2